



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Mail Stop: PETITIONS BRANCH

Shinobu NAKAYA et al.

Confirmation No. 2798

Serial No. 10/812,026

Atty Docket No. 2004 0386A

Filed March 30, 2004

Group Art Unit 2817

SURFACE ACOUSTIC WAVE DEVICE

PATENT OFFICE FEE TRANSMITTAL FORM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Attached hereto is a check in the amount of \$130.00 to cover Patent Office fees relating to filing the following attached papers:

A duplicate copy of this paper is being submitted for use in the Accounting Division, Office of Finance.

The Commissioner is authorized to charge any deficiency or to credit any overpayment associated with this communication to Deposit Account No. 23-0975, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.

Respectfully submitted,

Shinobu NAKAYA et al.

Registration No. 52,430

Attorney for Applicants

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FEB W PROPERTY OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

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PETITION TO MAKE SPECIAL REQUEST FOR ACCELERATED EXAMINATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Petition is hereby made to make the above identified application special and accelerate examination of this application. As per the requirements of MPEP 708.02, section VII, the Applicants provide each of the required items (A)-(E) as follows:

- (A) Accompanied with this petition to make special is the required fee set forth in 37 C.F.R. 1.17(h);
- (B) A Preliminary Amendment is submitted concurrently herewith which amends claims 1, 3 and 5, and cancels claim 4. Applicants submit that all of the claims (i.e., claims 1-3 and 5-38) of this application are directed to a single invention, but in the event that the Patent Office takes the position that all the claims presented are not obviously directed to a single invention, Applicants hereby offer to make an election without traverse;
- (C) Applicants submit that a pre-examination search was made. In particular, Applicants note that class 333, subclasses 193, 194 and 195 have been searched, as well as class 310,

subclasses 313R, 313A, 313B, 313C and 313D. A copy of the references found during this search have been submitted with the Information Disclosure Statement filed concurrently with this petition.

- (D) Applicants submit that the following are the references deemed most closely related to the subject matter encompassed by the claims:
 - U.S. 6,744,333; ١.
 - U.S. 6,114,926; II.
 - U.S. 6,720,847; III.
 - U.S. 6,597,262; and

A copy of each of references I-IV has been submitted with the Information Disclosure IV. Statement filed concurrently herewith, and a copy of reference V was submitted with the Information Disclosure Statement filed on March 30, 2004.

(E) Applicants provide the following detailed discussion of the above mentioned references which point out how the claimed subject matter of the present application is patentable over the references:

The present application includes claims 1-3 and 5-38, of which claims 1 and 3 are **DETAILED DISCUSSION** independent claims. These independent claims recite at least the following features that Applicants submit are not anticipated, suggested, or rendered obvious by the references listed in

Independent claim 1 recites the features of a plurality of surface acoustic wave elements connected in parallel; wherein each surface acoustic wave element comprises a first and second section (D) above: reflector electrode disposed in a propagating direction of a surface acoustic wave; wherein one

ground connection electrode connects together a first part of each comb shaped electrode pair forming interdigital transducer electrodes; and wherein one ground pad is connected to the ground connection electrode.

Independent claim 3 recites the features of first, second, third and fourth surface acoustic wave elements; wherein the first and third surface acoustic wave elements are disposed in a propagating direction of a surface acoustic wave and are connected in parallel; wherein the second and fourth surface acoustic wave elements are disposed in the propagating direction of the surface acoustic wave and are connected in parallel; wherein in at least one of the first and second surface acoustic wave elements, a first part of each comb shaped electrode pair is connected together in common by at least one ground connection electrode; and wherein one ground pad connects to the at least one ground connection electrode.

Applicants submit that at least the above features recited in claims 1 and 3 are not anticipated, suggested or rendered obvious by the references listed in section (D) above, for the following reasons:

I. U.S. 6,744,333

This reference discloses a surface acoustic wave filter device having a plurality of surface acoustic wave filter elements. As shown in Fig. 1, surface acoustic wave elements 2 and 3 are disposed serially along a surface wave propagation direction. Further, as also shown in Fig. 1, a separate ground terminal is provided for each of the interdigital transducer (IDT) electrodes.

Based on the foregoing, Applicants submit that while this reference discloses a surface acoustic wave filter having a plurality of surface acoustic wave elements disposed serially, this reference does not disclose, suggest or otherwise render obvious the above-mentioned combination of features regarding surface acoustic wave elements being connected in parallel, and multiple comb shaped electrode pairs of the surface acoustic wave elements being connected together in common by one ground pad, as recited in independent claims 1 and 3.

II. U.S. 6,114,926

This reference discloses surface acoustic wave filters 11 and 21 which are connected in a serial manner (see Fig. 7 and col. 7, line 67 - col. 8, line 1). In addition, each of the electrodes that forms the filters 11 and 21 is provided with a separate ground terminal (see Fig. 7).

Based on the foregoing, Applicants submit that while this reference discloses a surface acoustic wave filter having a plurality of surface acoustic wave elements disposed serially, this reference does not disclose, suggest or otherwise render obvious the above-mentioned combination of features regarding surface acoustic wave elements being connected in parallel, and multiple comb shaped electrode pairs of the surface acoustic wave elements being connected together in common by one ground pad, as recited in independent claims 1 and 3.

III. U.S. 6,720,847

This reference discloses a surface acoustic wave filter 301 having two SAW elements connected serially (see Fig. 9). In addition, a separate ground terminal 204 is provided for each of the electrodes (see Fig. 9).

Based on the foregoing, Applicants submit that while this reference discloses a surface acoustic wave filter having a plurality of surface acoustic wave elements disposed serially, this reference does not disclose, suggest or otherwise render obvious the above-mentioned combination of features regarding surface acoustic wave elements being connected in parallel, and multiple comb shaped electrode pairs of the surface acoustic wave elements being connected together in common by one ground pad, as recited in independent claims 1 and 3.

IV. U.S. 6,597,262

This reference discloses a surface acoustic wave filter 200 having a first surface acoustic wave element 201 and a second surface acoustic wave element 202 connected serially (see Fig. -1). Electrode pads 214 and 215 as the input and output terminals are arranged between the longitudinally connected surface acoustic wave elements 201, 202 (see Fig. 1 and col. 4, lines 46-^ 50). Further, a ground pad 213 is provided which is connected to a plurality of IDT electrodes (see Fig. 1).

Based on the foregoing, Applicants submit that while this reference discloses a surface acoustic wave filter having a plurality of surface acoustic wave elements disposed serially and a ground pad that connects plural IDT electrodes, this reference does not disclose, suggest or otherwise render obvious the above-mentioned combination of features regarding surface acoustic wave elements being connected in parallel, and multiple comb shaped electrode pairs of the surface acoustic wave elements being connected together in common by one ground pad, as recited in independent claims 1 and 3.

This reference discloses a surface acoustic wave device that is provided with at least V. JP 2002-319843 three couples of interdigital electrodes 1, wherein the terminals of the interdigital electrodes 1 are connected to a common earth terminal (see Abstract).

Based on the foregoing, Applicants submit that while this reference discloses a plurality of electrodes connected to a common earth terminal, this reference does not disclose, suggest or otherwise render obvious the above-mentioned combination of features regarding surface acoustic wave elements being connected in parallel, and multiple comb shaped electrode pairs of the surface acoustic wave elements being connected together in common by one ground pad, as recited in independent claims 1 and 3.

Because of the above-mentioned distinctions, Applicants believe that independent claims Conclusion 1 and 3, and all claims that depend therefrom, are not anticipated by any of the above-mentioned references. Further, Applicants believe that the distinctions are such that a person having ordinary skill in the art at the time of the invention would not have been motivated to modify or combine any of the above-mentioned references in such a manner so as to result in, or otherwise

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render obvious, the present invention as recited in claims 1-3 and 5-38. Therefore, Applicants submit that claims 1-3 and 5-38 are allowable over the above-mentioned prior art references.

In view of the forgoing, since Applicants have provided each of the necessary items (A)(E) identified above, Applicants respectfully request that this Petition to Make Special be granted
and the examination of this application be accelerated.

The Special Program Examiner is invited to contact the undersigned by telephone if is felt that there are any issues remaining which must be resolved before the granting of this Petition to Make Special.

Moreover, for at least the reasons found in item (E) above, it is submitted that the present application is clearly allowable over the prior art of record.

In the event, however, that the Examiner has any comments or suggestions of a nature necessary to place this place in condition for allowance, then the Examiner is kindly requested to contact Applicants' undersigned attorney by telephone to promptly resolve any such matters.

Respectfully submitted,

Shinobu NAKAYA et al.

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